INTERNATIONAL SEARCH REPORT

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plication No

167375700

PCT/GB 03/05008

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 E06C7/46

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) $\begin{tabular}{ll} \bf IPC & 7 & E06C \end{tabular}$

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Citation of document, with indication, where appropriate, of the relevant passages	Relevant to daim No.	
GB 2 286 621 A (MCCOLGAN PETER ANTHONY GERARD ;SWAIN MAXWELL (GB)) 23 August 1995 (1995-08-23)	1,6-8, 14-16	
figures	2,3,5, 9-13	
EP 0 745 753 A (LEWIS STANLEY TREVOR; SANDHAM JOHN MICHAEL (GB)) 4 December 1996 (1996-12-04) column 7, line 5 - line 6; figures 1,4,6	2,3	
US 1 897 840 A (GREENE GEORGE H) 14 February 1933 (1933–02–14) figures	5,11-13	
US 5 078 231 A (DAVIS ALLEN N) 7 January 1992 (1992-01-07) column 3, line 43; figure 1	9,10	
	GB 2 286 621 A (MCCOLGAN PETER ANTHONY GERARD; SWAIN MAXWELL (GB)) 23 August 1995 (1995-08-23) figures EP 0 745 753 A (LEWIS STANLEY TREVOR; SANDHAM JOHN MICHAEL (GB)) 4 December 1996 (1996-12-04) column 7, line 5 - line 6; figures 1,4,6 US 1 897 840 A (GREENE GEORGE H) 14 February 1933 (1933-02-14) figures US 5 078 231 A (DAVIS ALLEN N) 7 January 1992 (1992-01-07)	

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X Further documents are listed in the continuation of box C. X Patent family members are listed in annex.		
Special categories of cited documents: A* document defining the general state of the art which is not considered to be of particular relevance E* earlier document but published on or after the International filling date L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another clation or other special reason (as specified) O* document referring to an oral disclosure, use, exhibition or other means P* document published prior to the international filling date but later than the priority date claimed	"T" tater document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention. "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone. "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family	
Date of the actual completion of the international search 9 March 2004	Date of mailing of the International search report 16/03/2004	
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentiaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Demeester, J	



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	ntion) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category •	Chatton of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GB 2 332 697 A (PARKER NIGEL) 30 June 1999 (1999-06-30) claim 1C; figure 4	1,5,6, 11-14
A	GB 2 057 040 A (SHAYNE C) 25 March 1981 (1981-03-25) page 1, line 7,8; figures 5,6	1
A	EP 0 329 422 A (WEATHERALL BARRIE) 23 August 1989 (1989-08-23) figure 3	2,3
A	US 1 379 808 A (FIES HERBERT W) 31 May 1921 (1921-05-31) page	5,11-13
,		



Information on patent family members

Internatio

Internatio plication No PCT/GB 03/05008

Patent family member(s) Publication Patent document Publication cited in search report date date GB 2286621 Α 23-08-1995 NONE EP 0745753 Α 04-12-1996 CA 2201270 A1 27-09-1998 ΕP 0745753 A1 04-12-1996 2301614 A ,B 11-12-1996 GB 2315293 A ,B GB 28-01-1998 12-09-2002 69622796 D1 DE DE 69622796 T2 03-04-2003 ES 2180701 T3 16-02-2003 Α US 1897840 14-02-1933 NONE US 5078231 Α 07-01-1992 NONE GB 2332697 Α 30-06-1999 GB 2346607 A 16-08-2000 GB 2057040 Α 25-03-1981 NONE EP 0329422 Α 23-08-1989 EΡ 0329422 A1 23-08-1989 04-10-1989 GB 2216168 A ,B US 1379808 Α 31-05-1921 NONE